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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/080,861	05/18/1998	HIROSHI ENDO	1272.6808CI/	9856

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EXAMINER

KIANNI, KAVEH C

ART UNIT

PAPER NUMBER

2624

DATE MAILED: 11/23/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/080,861

Applicant(s)

ENDO ET AL.

Examiner

Kevin C Kianni

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 4 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 14-27 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 13-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over combination of Inuzuka et al. (US 5,162,838) and Endo et al. (US 5754304).

Regarding claim 13, Inuzuka teaches a printing system (shown in fig. 1a) including an image processing section (shown in fig. 8) and a printing section 10 to perform printing on a printing medium based on image data (see col. 5, lines 47-51 and 66-68), said system comprising: a memory 1170 for storing the image data (col. 8, lines 19-23); first processing means 1504 for executing image data magnifying processing based on first magnifying rate information (col. 11, lines 5-19 and 30-33); and second processing means 1507 for executing the image data magnifying processing for an image to be printed based on the image data magnified by said first processing means, based on second magnifying rate information (see fig. 8, items 1507 and 1506; col. 11, lines 2-22; wherein the software for performing magnification is stored in program memory that is controlled by CPU—see col. 9, lines 47-52), a processing load to be borne by said first processing means (see col. 11, lines 51-54), a capacity of said

memory (col. 14, lines 8-17), and a magnifying rate of the image to be printed on the printing medium based on the image data (see col. 23, lines 12-17).

However, Inuzuka does not explicitly teach/state the above magnifying rate wherein said first magnifying rate information is determined based on at least one of a resolution of printing performed by said printing section is based on a resolution shown by the image data. Endo teaches a printing system (see fig. 1) that includes the above underlined limitation (see fig. 2, item 112 and abstract). Thus, Inuzuka's printer magnification feature assures resolution properties can satisfactorily be exhibited (col. 3, lines 1-4). Therefore, it would have been obvious to a person of ordinary skill in the art when the invention was made to modify Inuzuka's printing system by incorporating Endo's magnification processing unit 112 in order to produce a printing system that includes the above underlined limitation. The resultant printing system would have an improved image quality (col. 12, lines 19-22).

Regarding claim 14, as stated in rejection of claim 13, Inuzuka further teaches wherein said second magnifying rate information is determined based on said first magnifying rate information and the magnifying rate of the image, to be printed on the printing medium (col. 1, line 66-col. 2, line 3), based on the image data (see col. 11, lines 2-4; also col. 12, lines 15-22).

Regarding claim 15, as stated in rejection of claim 14, Inuzuka further teaches wherein the magnifying rate of the image, to be printed on the printing medium (col. 1, line 66-col. 2, line 3), based on the image data is a magnifying rate corresponding to a product of a magnifying rate shown by said first magnifying rate information multiplied

by a magnifying rate shown by said second magnifying rate information (see col. 11, lines 2-22 and 30-33; wherein it is inherent that the magnification rate arithmetic/multiplication between the first magnification rate--scanned/hardware data-- and the second magnification rate--program memory/software1506-- is carried out by the arithmetic circuit 1504 in order to magnify the image data rate).

Regarding claim 16, as stated in rejection of claim 13, Inuzuka further teaches wherein said memory is provided in the printing section to store the image data magnified by said first processing means (see col. 11, lines 2-22 and 30-33).

Regarding claim 17, as stated in rejection of claim 13, Inuzuka further teaches wherein said second processing means is provided in the printing section (see col. 5, lines 66-68).

Regarding claim 18, as stated in rejection of claim 13, Inuzuka further teaches the printing section having a printing apparatus using a printing head to perform printing on the printing medium and the image processing section having an apparatus outputting the image data to the printing apparatus (see col. 19, lines 45-51).

Regarding claims 19-20, as stated in rejection of claim 18, Inuzuka further teaches wherein the printing head is an ink jet head ejecting ink onto the printing medium (col. 3, lines 3-18) and wherein the ink jet head has electro-thermal converting element applying thermal energy to ink to eject the ink by utilizing the thermal energy (see col. 7, lines 3-10).

Regarding claim 21, Inuzuka teaches a printing method of performing printing on a printing medium by means of a printing section, based on image (see col. 5, lines 66-

68) data, said method comprising the steps of: executing image data magnifying processing based on first magnifying rate information (col. 11, lines 5-19 and 30-33); and performing printing an image obtained by executing magnifying processing for the image data magnified by said executing magnifying step based on second magnifying rate information (see fig. 8, items 1507 and 1506; col. 11, lines 2-22; wherein the software for performing magnification is stored in program memory that is controlled by CPU—see col. 9, lines 47-52), a processing load to be borne by said first processing means (see col. 11, lines 51-54), a capacity of a memory for storing the image data (col. 14, lines 8-17), and a magnifying rate of the image to be printed on the printing medium based on the image data (see col. 23, lines 12-17). The arguments regarding Inuzuka's teaching of the resolution shown be image data and the said first magnifying rate information is determined based on at least one of a resolution of printing performed by said printing section is analogously discussed in rejection of claim 13 is applicable in rejection of claim 21.

Regarding claims 22-27, the arguments presented in rejection of claims 14-16 and 18-20, above, are consecutively analogous to arguments in rejection of claims 22-27.

Response to Amendment

2. Applicant's arguments filed on Jun 25, 01 have been fully considered and thus the examiner has used a new reference to overcome the applicant's objections.

Citation of Relevant Prior Art

3. Prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In accordance with MPEP 707.05 the following references are pertinent in rejection of this application since they provide substantially the same information disclosure as this patent does. These references are:
Friedman 4334867

The above references are cited to manifest the relevance of these references as prior art.

Contact Information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaveh Cyrus Kianni whose telephone number is (703) 308-1216. The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 6:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore, can be reached at (703) 308-7452.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 308-9051, (for formal communications intended for entry)

or:

(703) 308-5397, (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to

the Group Receptionist whose telephone number is (703)305-3900.

Kaveh Cyrus Kianni
Patent Examiner

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November 2, 2001

David Moore

DAVID MOORE
SUPERVISORY PATENT EXAMINER
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